

PATIENT MONITOR

CLAIMS

I claim:

- 1 A patient monitoring device in combination with a fluid reservoir, comprising:
 - a processing device;
 - a display operatively connected with the processing device;
 - a selector operatively connected with the processing device;
 - 5 a housing;
 - at least one air pump mounted in the housing and operatively connected with the processing device, the air pump being adapted to provide at least one of air pressure and air suction;
 - a fluid reservoir operatively connected with the air pump, the air pump providing
 - 10 suction to the reservoir, a suction canister that is adapted to collect fluid when the air pump applies a suction to the suction canister, the fluid reservoir being connected with the air pump so that fluid is precluded from drawing into the air pump;
 - at least two sockets, each socket being substantially identical with a number of socket connectors, the sockets being electrically connected in parallel with one another, the socket
 - 15 connectors being operatively connected with the processing device;
 - a first sensor, the first sensor being adapted to generate a signal according to a predefined criteria, the first sensor having a first sensor plug that corresponds to the at least two sockets whereby the first sensor plug removably couples with any of the at least two sockets, the first sensor plug having a set of first plug connectors that cooperates with the socket connectors,
 - 20 the first sensor being connected with fewer than all of the socket connectors when the first sensor plug is coupled with either of the at least two sockets and defining a first subset of the

socket connectors, the first subset of the socket connectors being those socket connectors that connect with the first sensor when the first sensor plug is coupled with one of the at least two sockets; and

25 a second sensor, the second sensor being adapted to generate a signal according to a predefined criteria, the second sensor having a second sensor plug that corresponds to the at least two sockets whereby the second sensor plug removably couples with any of the at least two sockets, the second sensor plug having a set of second plug connectors that cooperates with the socket connectors, the second sensor being connected with fewer than all of the socket
30 connectors when the second sensor plug is coupled with either of the at least two sockets and defining a second subset of the socket connectors, the second subset of the socket connectors being those socket connectors that connect with the second sensor when the second sensor plug is coupled with one of the at least two sockets, the second subset of the socket connectors also being a different subset from the first subset of the socket connectors; and

35 an expansible medical suction canister comprising:

 a body, the body having a top and an opposing bottom; the body defining an expansible interior chamber between the top and the bottom, the chamber being expandable to an open position and being compressible from the open position to a closed position; the body including one of a bellows and of at least first and second concentric tubes telescopingly engaged in liquid
40 tight engagement; and

 a support connected between the top and the bottom, the support being adapted to releasably lock the chamber in the open position.

2. The combination of claim 1, wherein the support is a telescoping member, the support having a first element and a second element, the first element including a detent, and the detent engaging the second element.

3. The combination of claim 2 wherein the detent is a leg, wherein the second element has a stop surface, and the leg has an end that abuts the stop surface.

4. The combination of claim 3 wherein the leg is frangible.

5. The combination of claim 2 wherein the detent has a surface that engages the second element.

6. The combination of claim 5 wherein the detent is biased toward engagement with the second element.

7. The combination of claim 6 wherein the second element has a cooperating detent receptacle.

8. The combination of claim 2 wherein the second element has a cooperating detent receptacle.

9. A patient monitoring device in combination with a fluid reservoir, comprising:

a processing device;

a display operatively connected with the processing device;

a selector operatively connected with the processing device;

a housing;

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at least one air pump mounted in the housing and operatively connected with the processing device, the air pump being adapted to provide at least one of air pressure and air suction;

10 a fluid reservoir operatively connected with the air pump, the air pump providing suction to the reservoir, a suction canister that is adapted to collect fluid when the air pump applies a suction to the suction canister, the fluid reservoir being connected with the air pump so that fluid is precluded from drawing into the air pump;

at least two sockets, each socket being substantially identical with a number of socket connectors, the sockets being electrically connected in parallel with one another, the socket
15 connectors being operatively connected with the processing device;

a first sensor, the first sensor being adapted to generate a signal according to a predefined criteria, the first sensor having a first sensor plug that corresponds to the at least two sockets whereby the first sensor plug removably couples with any of the at least two sockets, the first sensor plug having a set of first plug connectors that cooperates with the socket connectors,
20 the first sensor being connected with fewer than all of the socket connectors when the first sensor plug is coupled with either of the at least two sockets and defining a first subset of the socket connectors, the first subset of the socket connectors being those socket connectors that connect with the first sensor when the first sensor plug is coupled with one of the at least two sockets; and

25 a second sensor, the second sensor being adapted to generate a signal according to a predefined criteria, the second sensor having a second sensor plug that corresponds to the at least two sockets whereby the second sensor plug removably couples with any of the at least two sockets, the second sensor plug having a set of second plug connectors that cooperates with the socket connectors, the second sensor being connected with fewer than all of the socket
30 connectors when the second sensor plug is coupled with either of the at least two sockets and

defining a second subset of the socket connectors, the second subset of the socket connectors being those socket connectors that connect with the second sensor when the second sensor plug is coupled with one of the at least two sockets, the second subset of the socket connectors also being a different subset from the first subset of the socket connectors; and

35 an expansible medical suction canister comprising:

 an expansible chamber, the chamber being expandable to an open position and being compressible from the open position to a closed position, the chamber having a first end and an opposing second end, the first and the second ends being spaced relatively farther apart in the open position than in the closed position; and

40 a support, the support being connected between the opposing ends, the support moving with the opposing ends between the open and closed positions, the support having a releasable locked condition in the open position.

10. The expansible medical suction canister of claim 9 wherein the support has a first element and a second element, wherein the first and the second elements move between open and closed positions with the canister, wherein the first element has a stop surface, wherein the second element includes a leg with an end that abuts the stop surface in the open position and compression of the canister to the closed position is resisted.

11. A patient monitoring device in combination with a fluid reservoir, comprising:

 a processing device;

 a display operatively connected with the processing device;

 a selector operatively connected with the processing device;

5 a housing;

at least one air pump mounted in the housing and operatively connected with the processing device, the air pump being adapted to provide at least one of air pressure and air suction;

10 a fluid reservoir operatively connected with the air pump, the air pump providing suction to the reservoir, a suction canister that is adapted to collect fluid when the air pump applies a suction to the suction canister, the fluid reservoir being connected with the air pump so that fluid is precluded from drawing into the air pump;

at least two sockets, each socket being substantially identical with a number of socket connectors, the sockets being electrically connected in parallel with one another, the socket
15 connectors being operatively connected with the processing device;

a first sensor, the first sensor being adapted to generate a signal according to a predefined criteria, the first sensor having a first sensor plug that corresponds to the at least two sockets whereby the first sensor plug removably couples with any of the at least two sockets, the first sensor plug having a set of first plug connectors that cooperates with the socket connectors,
20 the first sensor being connected with fewer than all of the socket connectors when the first sensor plug is coupled with either of the at least two sockets and defining a first subset of the socket connectors, the first subset of the socket connectors being those socket connectors that connect with the first sensor when the first sensor plug is coupled with one of the at least two sockets; and

25 a second sensor, the second sensor being adapted to generate a signal according to a predefined criteria, the second sensor having a second sensor plug that corresponds to the at least two sockets whereby the second sensor plug removably couples with any of the at least two sockets, the second sensor plug having a set of second plug connectors that cooperates with the socket connectors, the second sensor being connected with fewer than all of the socket
30 connectors when the second sensor plug is coupled with either of the at least two sockets and

defining a second subset of the socket connectors, the second subset of the socket connectors being those socket connectors that connect with the second sensor when the second sensor plug is coupled with one of the at least two sockets, the second subset of the socket connectors also being a different subset from the first subset of the socket connectors; and

35 an expansible medical suction canister comprising:

 an expansible chamber, the chamber being expandable to an open position and being compressible from the open position to a closed position, the chamber having a first end and an opposing second end, the first and the second ends being spaced relatively farther apart in the open position than in the closed position; and

40 a support, the support being connected between the opposing ends, the support moving with the opposing ends between the open and closed positions, the support having a locked condition in the open position, the support being a telescoping member, the support having a first element and a second element, the first element including a detent, and the detent engaging the second element.

12. The expansible medical suction canister of claim 11 wherein the detent is biased toward engagement with the second element.